Honors CCGPS Analytic Geometry Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Review – Basics of Geometry Unit 1

1. If an ∠ measures 68° 28’ 14’’, what’s the measure of its complement and its supplement?

2. The measure of an angle is 4 times the measure of its complement. What’s the supplement of the angle?

Fill in the blank:

3. If 2 angles are complementary, then they both have to be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

4. Angles that are complementary and congruent are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ angles.

5. The supplement of an obtuse angle has to be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.



6. Find *x*. 7. Find the *m*1.



8. AB⊥CD. The measure of 4 and 5 are in the ratio 7:5.

What are the measures of 4 & 5?

9. Find the measure of all 4 angles in the diagram below:



10. R = 132°. R is bisected, then one of the resulting angles is trisected. What’s the measure of one of the smallest angles?



11. In the diagram at right *j*||*k*.

 ∠1 = 108°, label the measures of the other 7 ∠s.

12. Find x. 13. Find x, then find the measure of ∠2.



14. “*If it’s not a duck, then it dances*” Write the converse, inverse, and contrapositive:

Conv:

Inv:

Contr:

15. If an original statement is true, then contrapositive must be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

16. Assume the following are true statements, use syllogism to write a valid conclusion.

*If I listen to Drake, then I might lose inteligence.*

 *If I lose inteligence, I’ll start liking Drake.*

 *If I like Drake, then adults will make fun of me.*

17. Name a counterexample that would show the statement, “*If it’s a Fararri, then it’s red*” to be false.

18. Use the diagram at right. Find x & y.

Given:

AB⊥BD

∠ACB = x + y

∠BCD = 2x + 4

∠ABC = x + 20

∠BCD = y + 10



19.

Given: 

Prove: 

|  |  |
| --- | --- |
| Statement | Reason |
| 1.  | 1. Given |
| 2.  | 2. Definition of Perpendicular |
| 3. ∠F ≅ ∠H | 3. |